Application No.: 10/617,148 7 Docket No.: 491442011620

REMARKS

The Applicants wish to express appreciation to Examiner Mew for his courtesy during the telephone interview conducted on May 12, 2005. During the interview, the structure, features and operation of the present invention were described, and the distinctions between the pending claims and the reference relied upon by the Examiner were discussed. As discussed during the interview, with the amendments submitted above, it is respectfully submitted that all of the claims in the application are patentably distinguishable over the references, and are in condition for allowance. The rejections are discussed below.

Claims 1 and 3-7 are pending in the application. The disclosure was objected to because the Application No. of the parent application to which the present application claims priority was not listed in the specification. Claims 1-5 were objected to because several acronyms were not first provided in complete form. Claims 1-4, 6 and 7 were rejected under 35 U.S.C. §102(e) as being anticipated by Coffey. Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over Coffey. Claims 1 and 3-7 have been amended. Claim 2 has been canceled. Reexamination and reconsideration of the application in view of the amendments and following remarks is respectfully requested.

The specification has been amended to include the Application No. of the parent application to which the present application claims priority. Claims 1 and 3 been amended to include the complete form of ALPA. Claim 4 has been amended to include the complete form of ARB, OPN and CLS. Claim 5 has been rewritten to include the complete form of R_RDY and OPN. With these amendments, it is respectfully submitted that the objections to the specification and claims have been overcome.

Claims 1-4, 6 and 7 were rejected under 35 U.S.C. §102(e) as being anticipated by Coffey. With the amendments to claims 1 and 3, it is respectfully submitted that this rejection has been overcome.

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As discussed during the interview, Coffey fails to disclose, teach or suggest the limitation in amended claim 1 that recites "wherein the crossbar switch creates the direct paths between the ports based on the OPN arbitrated loop primitives." In Coffey, the crosspoint switch (CPS) of Figure 5 can be configured during initialization to form a loop of devices as illustrated in Figure 4. This configuration is described in paragraph [0104]. Although the loop may be re-configured to connect FC-AL analyzers into the loop and different points (see paragraph [0105]), nevertheless the devices are always connected in a loop. The devices are never directly connected to each other and no direct path is formed, as recited in amended claim 1. Furthermore, the loop in Coffey is formed by configuring the CPS using a processor (see paragraph [0103]), not based on the OPN arbitrated loop primitive as recited in amended claim 1.

In addition, as discussed during the interview, Coffey fails to disclose, teach or suggest the limitation in amended claim 1 that recites "a route determination apparatus including a routing table comprised of Arbitrated Loop Physical Addresses (ALPAs) and their associated ports, the route determination apparatus separate from the ports and directly coupled to each port and the crossbar switch." In the Office Action, the Examiner equated the route determination apparatus with a hub, and equated the routing table with a series of loop initialization frames. In doing so, the Examiner apparently contends that the route determination apparatus and routing table are spread out throughout the nodes in the loop and are part of the nodes in the loop. As an initial matter, although the hub in Coffey connects devices (see Figure 7 of Coffey and paragraph [0006] for a general description of a hub), it does not contain a route determination apparatus for configuring the hub. Second, claim 1 recites that "the route determination apparatus separate from the ports and directly coupled to each port and the crossbar switch," which means that the route determination apparatus is a distinct and separate structure from the ports and crossbar switch (see FIG. 4 of the application.) No such distinct and separate route determination apparatus exists in Coffey. Third, there is no "routing table comprised of Arbitrated Loop Physical Addresses (ALPAs) and their associated ports" as recited in claim 1. The nodes in Coffey are only aware of adjacent nodes and their addresses, and therefore do not maintain a table of ports and their associated ALPA addresses.

Because Coffey does not disclose all of the limitations of amended claim 1, it is respectfully submitted that the rejection of claim 1 under 35 U.S.C. §102(e) as being anticipated by Coffey has been overcome.

Similar arguments can be made with respect to claim 3. As discussed during the interview, Coffey fails to disclose the limitation in amended claim 3 that recites "route determination apparatus separate from the ports and directly coupled to each port through separate signaling paths for selecting a direct route between ports based on received Fibre Channel Arbitrated Loop primitives from the ports and including a routing table containing Arbitrated Loop Physical Addresses (ALPAs) and their associated ports." As described above, In Coffey, the devices are always connected in a loop. The devices are never directly connected to each other and no "direct route" is formed, as recited in amended claim 1. Furthermore, the loop in Coffey is formed by configuring the CPS using a processor (see paragraph [0103]), not based on "received Fibre Channel Arbitrated Loop primitives from the ports" as recited in amended claim 3.

Because Coffey does not disclose, teach or suggest all of the limitations of amended claim 3, it is respectfully submitted that the rejection of claim 3 under 35 U.S.C. §102(e) as being anticipated by Coffey has been overcome. In addition, because claims 4, 6 and 7 depend from claim 3, the rejection of those claims has also been overcome for the same reasons provided above with respect to claim 3.

Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over Coffey. This rejection is respectfully traversed.

Claim 5 depends from claim 3. As discussed above with respect to claim 3, Coffey does not disclose, teach or suggest a "route determination apparatus separate from the ports and directly coupled to each port through separate signaling paths for selecting a direct route between ports based on received Fibre Channel Arbitrated Loop primitives from the ports and including a routing table containing Arbitrated Loop Physical Addresses (ALPAs) and their associated ports."

Therefore, these same limitations are not disclosed, taught or suggested in claim 5.

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Because Coffey does not disclose, teach or suggest all of the limitations of amended claim 5, it is respectfully submitted that the rejection of claim 5 under 35 U.S.C. §103(a) as being unpatentable over Coffey is traversed.

The Applicants have identified additional references and have submitted them in an Information Disclosure Statement (IDS) filed concurrently herewith. In particular, U.S. Patent No. 6,614,796 ("Black") discloses a distributed route determination apparatus in FIG. 4 that includes a protocol bus 121, routing table 127, scoreboard 125, and blocks 102, 104 and 106 containing ports that program the crossbar switch 100. (See FIG. 3 and col. 13 lines 33-42 for a description of the portion of the ports that program the crossbar switch.) This is different from the claims of the present application, which recite "route determination apparatus separate from the ports and directly coupled to each port."

In addition, U.S. Patent No. 6,324,181 ("Wong") discloses a FC_AL system that assigns priority to nodes based on the ALPAs (see col. 3 lines 10-13). This is different from the claims of the present application, which recite "priority for each port is independent of the ALPAs."

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If, for any reason, the Examiner finds the application other than in condition for allowance, Applicants request that the Examiner contact the undersigned attorney at the Los Angeles telephone number (213) 892-5752 to discuss any steps necessary to place the application in condition for allowance.

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In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit** Account No. 03-1952 referencing Docket No. 491442011620.

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Respectfully submitted,

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